

REMARKS

Applicant wishes to thank Examiner Barr for the courtesy of a short phone interview wherein Examiner Barr agreed to reconsider the current § 112 rejection. No commitment as to allowability was made.

The Office Action indicated that the subject matter of Claims 36-38 was allowed and further indicated that Claims 31 and 32 would be allowed if rewritten in independent form.

The Office Action raised an issue with regards to Claims 34 and 39-40 under the first paragraph of 35 U.S.C. § 112 as failing to provide a written description.

The claim in question defines the combined thicknesses of the silicon dioxide layers as being at least three times greater than the combined thicknesses of the zirconium dioxide layers. As can be seen on page 4, lines 17-24, the silicon SiO₂ layers 18, 22 and 26 have a combined thickness of approximately 3,700 angstroms, while the combined zircon oxide ZrO₂ layers 20 and 24 have a combined thickness of approximately 1,000 angstroms. Thus, there is more than adequate support in the written description of our specification for Claims 34, 39 and 40.

The Office Action further requested that the surface hardening layer be defined as an organo-silane material as an adequate definition for the triethoxymethyl silane layer in our specification. Applicant has accordingly amended the claims to meet this requirement.

Finally, the Office Action raised an issue with regards to the hydrophobic coating layer and contended that the specification only showed perfluoroalkylsilane as a preferred material, and that it would take undue experimentation to find other materials that could be hydrophobic. Applicant has addressed this issue by defining the layer as a transparent perfluorinated hydrophobic coating. In this connection it should be understood and appreciated that the class of compounds known as "perfluoroalkylsilanes" necessarily contain all alkyl bonds and a silicon

atom. Such compounds are known to be hydrophobic. However, a person of ordinary skill in the art knows that the hydrophobic properties of perfluorinated compounds are not limited to those where all groups on the silicon atom are perfluorinated alkyl groups, nor to those compounds wherein the perfluorinated groups are attached to a silicon atom. Rather, the perfluorination itself renders substances hydrophobic. For example, it is well known in the chemical arts that perfluorinated hydrocarbons, compounds that do not even contain a silicon atom, are non-miscible with water and are hydrophobic. And this is also true for perfluorinated hydrocarbons which contain other than perfluorinated alkyl, for example, perfluorinated alkenyl groups. Thus, a person of ordinary skill in the art would read the expressly disclosed "perfluoroalkylsilanes" (a class of a large number of compounds itself) as an example of the broader genus of perfluorinated hydrophobic compounds suitable for use in the present invention. In light of the foregoing, applicant submits that the present definition of "transparent perfluorinated hydrophobic coating" like the definition of organo silicon for the hardening layer, is more than adequate in defining those hydrophobic coating materials which are compatible to the present invention without any requirement of undue experimentation.

The test of enablement is set forth in the MPEP § 2164.01 which requires an analysis of whether a particular claim is supported by a disclosure in an application by determining whether that disclosure contains sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. As further set forth, the test of enablement is whether one reasonably skilled in the art can make or use the invention from the disclosures in the patent application coupled with information known in the cited prior art such as U.S. Patent No. 6,207,236 without undue experimentation. The specification need not disclose all possible hydrophobic coatings.

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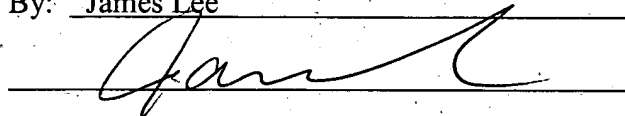
Applying these tests to the present claims, the amendment of a transparent perfluorinated hydrophobic coating would be within the teachings of *In re Wands*, 858 F.2d 731, 737 (Fed.Cir. 1988) (as cited and relied upon in MPEP § 2164.01(a)), and would be applicable to our presently amended claims. As the Examiner is aware, applicant only is required to disclose the preferred embodiment known at the time of filing the application, and by comparing the teachings in the prior art cited of record, than by any objective standard, the present amendment to the claims more than adequately will provide direction without any undue experimentation to a person of ordinary skill in this field to utilize and enjoy the advantages of the present invention.

It is believed that the present application is more than adequately in compliance with 35 U.S.C. § 112, and an early notification of allowance is requested.

If the Examiner believes that a telephone interview will help further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 17, 2003.

By: James Lee

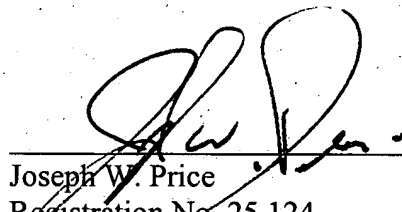


Signature

Dated: November 17, 2003

Very truly yours,

SNELL & WILMER L.L.P.


Joseph W. Price
Registration No. 25,124
1920 Main Street, Suite 1200
Irvine, California 92614-7230
Telephone: (949) 253-4920